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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/291,358 | 04/14/1999 | KENJI MASAKI | 325772200960 | 2014 |

25227 7590 05/09/2006

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EXAMINER

BHATNAGAR, ANAND P

| | |
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| ART UNIT | PAPER NUMBER |
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2624

DATE MAILED: 05/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/291,358

Applicant(s)

MASAKI, KENJI

Examiner

Anand Bhatnagar

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,7-9,14-17 and 19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,8,16 and 17 is/are allowed.
- 6) ☒ Claim(s) 15 and 19 is/are rejected.
- 7) ☒ Claim(s) 2,7,9 and 14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 April 1999 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 04/14/06 has been entered.

Claim Objections

2. Claims 2, 7, 9, and 14 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. As explained to applicant's representative, in a telephone interview on 03/29/06, that these claims are not necessary since they do not further limit the parent claim that they depend from, respectively, since the features of these claims are already present in the parent claims from which they depend from.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

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The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

A.) Claim 19 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. As explained to applicant's representative, in a telephone interview on 03/29/06, that this claim may not be enabled by the specifications since the claim requires the image to be color cast based on contrast and sharpness while this is not found anywhere in the specifications. If applicant believes that there is support for this in the specifications please show where in the specifications this has support.

B.) Claim 19 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. As explained to applicant's representative, in the telephone interview on 03/29/06, this claim is vague and indefinite as written. The 1st limitation, as well as the preamble, of this claim requires three or more items of an image being judged while in the third limitation only two items are being judged (contrast and sharpness). Here, as written, examiner is unsure if the color cast is also judged and is the third item. Further, applicant in the second limitation states that "performing a correction transaction

corresponding to the item about the item judged as a correction being required during judging,....” As interpreted by the examiner this is read as correcting the item which needs to be corrected. For example, if the contrast is judged to be needing correction then the contrast is corrected and the same for the other image variables. While, in the third limitation applicant states that edge enhancement is performed if the contrast and sharpness of the picture image are unusual which does not correspond to the second limitation wherein the item that is judged to be needing correction is corrected instead a third item is corrected based on other items. Finally, since the unusual contrast and sharpness results in color cast of an image, as according to the third limitation, is the color cast the third item being judged? And if the color cast is the third item being judged is this not unnecessary since the color cast is derived from the contrast and sharpness? One change needed to overcome this rejection applicant may want to modify the second limitation by making the items plural and deleting the phrase “about the item” and replacing it with the word “being.” Also in the last limitation clarify that the color cast, if it is enabled by the specifications, is the third item being judged, if that is the case, besides the contrast and sharpness. Examiner will address this claim as best understood.

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 15 is rejected under 35 U.S.C. 101 because applicant states that a program is recording on a recording medium and a recording medium maybe a myriad of items, such as paper, computer disc, chalk board, etc. Further it does not state that this is carried out by some type of processor, i.e. a computer. Having a program on a recording medium does not mean that this program is executed by any device. In order to overcome this rejection it must state that the program is on a computer readable medium wherein executed by a computer is carrying out the steps of or something equivalent.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Eschbach (U.S. patent 6,014,469), Katsuma (EP 0 357 385 A2), and Nagao (U.S. patent 6,055,340).

An image processing method which is correction processed for three or more items about a quality of color image data comprising:

judging a necessity/nonnecessity of correction of image data of a color image individually with respect to three or more of the items regarding the quality

of the image data (Eschbach; fig. 7 elements S920-S980, col. 6 lines 45-67, and col. 7 lines 3-35, wherein the contrast and exposure, i.e. read as image data of a color image, are judged to see if image correction is needed); and

performing a correction transaction corresponding to the item about the item judged as a correction being required during judging, unless judged that there is a nonnecessity of correction (Eschbach; fig. 7 element S980, wherein the image is filtered, i.e. read as corrected/enhanced, based on the judgement of the contrast and exposure data of the image.).

Eschban discloses to improve an image by detecting two variables, contrast and exposure, of an image and determining using two thresholds if there is a need to correct the image. If the results determine if there is a need to correct the image then a noise filter is applied to improve the image. Eschban does not disclose to consider a third variable of a color image to judge to see if an image needs correction. Katsuma teaches to judge the maximum and minimum pixel color values of the image and, if need be based on the result, then generate and apply a color masking coefficient to correct the image (Katsuma; abstract and page 2 lines 35-50). It would have been obvious to one skilled in the art to combine the teaching of Katsuma to the disclosure of Eschbach because they are analogous in image correction. One in the art would have been motivated to incorporate the teaching of Katsuma to that of Eschbach in order to judge three variables in an image in order to have an image with visually favorable quality (Katsuma; page 2 lines 35-37). Further, it is a matter of

configuration to analyze a specific number (two, three, four, five, etc.) of variables (ex. colors, luminance, sharpness, contrast, brightness, noise in the image, etc.) in an image to correct the image.

Eschbach, as modified by Katsuma, teaches to judge image variables, such as contrast, exposure, color components, etc. and based on the judgment make a correction to the image in order to enhance the image. The combination of Eschbach and Katsuma does "wherein the judging judges whether a contrast and sharpness of a picture image are unusual such that the picture image is color cast, wherein the performing the correction transaction is performed for correcting color cast when judged with the picture image color casting, and performing an edge enhancement correction of a picture image when it judges that the contrast and sharpness of picture image are unusual".

Nagao teaches "wherein the judging judges whether a contrast and sharpness of a picture image are unusual such that the picture image is color cast, wherein the performing the correction transaction is performed for correcting color cast when judged with the picture image color casting, and performing an edge enhancement correction of a picture image when it judges that the contrast and sharpness of picture image are unusual" (fig. 1 and col. 6 lines 18-67, wherein the sharpness is enhanced, i.e. obviously means that the sharpness is abnormal if it needs enhancement, and then edge enhancement is performed). It would have been obvious to one skilled in the art to combine the teaching of Nagao to the system of Eschbach, as modified by Katsuma, because

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they are analogous in image correction. One in the art would have been motivated to incorporate the teaching of Nagao, modified to perform edge enhancement based on contrast and sharpness, to the system of Eschbach, as modified by Katsuma, in order to have a method to suppress the noise and enhance the sharpness of digital images (Nagao; col. 3 lines 42-45).

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ulichney (U.S. patent 5,543,936) for adjusting the image parameters, such as contrast, of an input image to the desired level.

Contact Information

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anand Bhatnagar whose telephone number is (571) 272-7416, whose supervisor is Jingge Wu whose number is (571) 272-7429, Central fax is 571-273-8300, and Tech center 2600 customer service office number is 703-306-0377.

AB

Anand Bhatnagar

Technology Division 2624

April 28, 2006

JINGGE WU
PRIMARY EXAMINER

